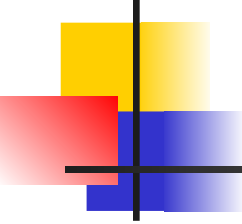


Army In Europe Radiation Safety Program

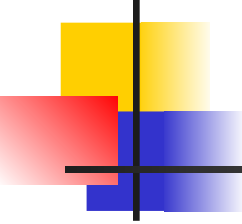
DRAFT AE 11-9, 1 Apr 2005



USAREUR

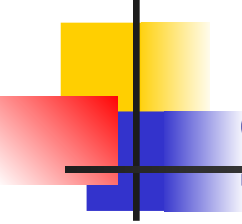
Radiation Safety Staff Officer

- Mr. Frank Dunfrund
 - USAREUR ODCS G1, Occupational Safety and Health
 - 370-6917
 - frank.dunfrund@us.army.mil



UR 385-12, 11 Sep 1990

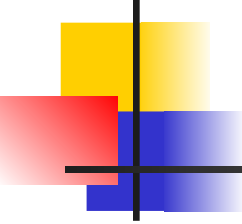
- Obsolete and out of date
- Based on AR 385-12 Ionizing Radiation Safety
 - Did not cover Lasers
 - Did not cover Radio Frequency Emitters
 - Refers to organizations that no longer exist



DRAFT UR 11-9 Radiation Safety Program, 31 Dec

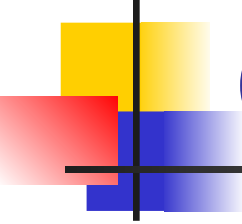
1999 Applies to Ionizing Radiation, Lasers,
and Radio Frequency Emitters

- Based on AR 11-9
- Establishes policy and responsibilities for safe use of radioactive materials and radiation emitting devices for the Army in Europe



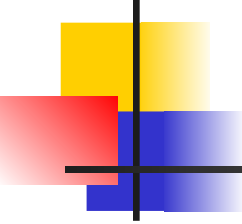
Is now Draft AE 11-9

- Formerly known as Draft UR 11-9
- The document is still a draft because of numerous changes in AR 11-9, and more changes are coming. None the less, it is the only written guidance that is USAREUR/7A and IMA-E specific.
- DRAFT AE 11-9 will be put out for comment, and after the comment period it will be published as AE 11-9.
- We can always make corrections later. What we cannot do is correct a document that has never been published.



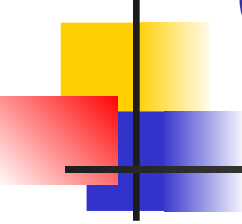
Chapter 1 Responsibilities

- CG to:
 - Appoint a Radiation Safety Staff Officer
 - Delegate signature authority of USAREUR/7A ARAs to USAREUR ODCS G1
 - Delegate signature authority of IMA-E ARAs to Regional Director, IMA-E



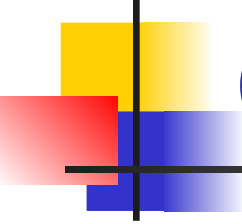
Installation Commander Responsibilities

- Appoint, train, and support an Installation RSO
- Coordinate with the WBV
- Keep an inventory of radioactive material and radiation emitters
- Keep Emergency responders informed of location and quantities of radioactive material
- Coordinate with local works councils
- Maintain a list of radio frequency controlled and uncontrolled areas
- Issue Army Radiation Permits using DA form 3337



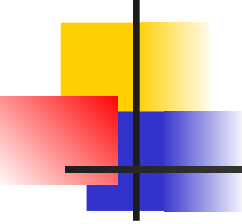
Commanders of Units having radioactive material or radiation emitters

- Appoint, train and support an RSO.
- Company commanders to appoint an LRSO
- Commanders of deployed units to coordinate with host Installation RSO
- LSO required if unit has Class IIIb or Class IV lasers that are not type classified



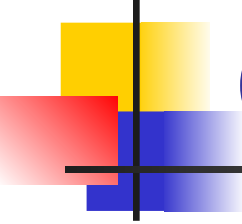
Commanders (cont)

- Conduct an annual physical inventory of radiation emitters and radioactive materials and provide a copy to the Installation RSO
- Ensure PBO tracks chemical detection equipment using RATTs
- Ensure Commercial Off The Shelf radiation equipment is tracked the same way as commodity equipment
- Ensure no radioactive material is sent to DRMS-I for disposal
- Coordinate with Installation RSO when bringing new radiation emitters into the Installation AO.
- Establish written policies and procedures necessary to comply with licenses, ARAs, ARPs, and law to include host nation law.



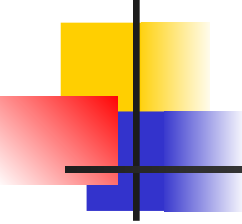
200th MMC Responsibilities

- Appoint an RCO to run the Radioactive Material Control Point
- RCO to review & comment on ARAs for commodities used for Army in Europe
- RCO to manage DoD RATTs
- Ensure PBO preparation and submission of annual Reconciliation Wipe Test Summary Report to DoD Central Registry
- POC for SOUMs and Information Notices



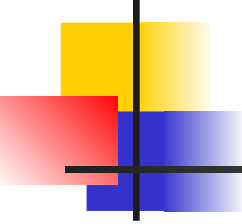
CHPPM-Europe

- Provide health physics support to RSSO
 - Surveys, contamination investigations
 - On site down range support
 - Counting Laboratory
- Assist in providing training for LRSOs
- Provide advice on radiation health affects from exposures, as requested
- Maintain a RAM Team IAW AR 40-13
- Designate a representative to attend the Army in Europe Radiation Safety Council



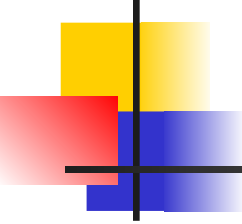
Director, TMDE Region Europe

- Calibrate and repair equipment at the Pirmasens ACL and other regions through out Europe.
- Operate the USATR-E RMPF
- Appoint a member to the Army in Europe RSC
- May perform nuclear evaluations as requested by USAREUR/7A



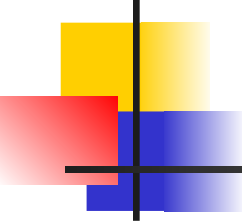
Installation RSO

- Direct the Installation Radiation Safety Program for the Installation Commander
- Assist units tenant to their Installation meet the requirements of NRC licenses and AE ARAs
- Notify RSSO when buildings/areas are no longer used or scheduled for demolition.
- Perform or be responsible for performing radiation safety functions for Installation Commander
- Coordinate with military and civilian emergency response organizations



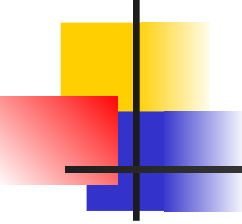
Installation RSO (Cont.)

- Coordinate with supporting medical personnel so personnel receive proper occupational health surveillance
- If necessary, assume duties of LSO
- Establish plans and procedures for credible emergencies.
- Establish an Installation RSC that meets at least twice per year.



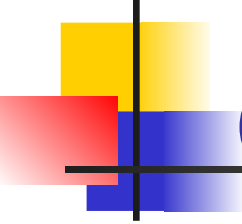
RSO (LRSO)

- Perform or be responsible for performing all radiation safety functions
- Establish plans and procedure for credible emergencies.
- Coordinate with military and civilian emergency response organizations
- If necessary, act as LSO
- Establish a radiation safety program to meet the commander's responsibility
- Consult with Installation RSO as necessary
- Be a member of the Installation RSC



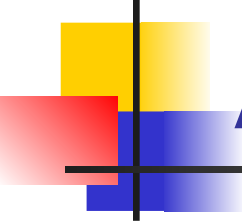
Property Book Officer

- Is the serialization Officer for the Army in Europe
- PBO will reconcile the unit's annual physical inventory of CAM, ICAM, CAD, GID with the RATTTS system
- Report reconciliation to RCO using equipment serial number pairs (equipment serial number, source serial number)



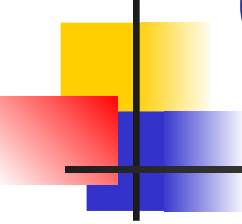
Installation Radiation Safety Council

- Required by AR 11-9 para 1-4(j).
- Provide unification and direction to Installation Radiation Safety Program
- Each tenant commander having radiation emitters will appoint a member
- Will meet at least twice per year and provide minutes to higher headquarters



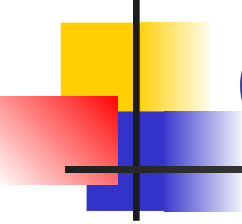
Army in Europe RSC

- Provide unification and direction to the Army in Europe Radiation Safety program
- RSC will meet at least twice per year
- Composed of RSSO, IMA-E representative, USAREUR/7A representative, the RCO, Installation RSOs, and representative from each USAREUR/7A Majcom (V Corps, Setaf, etc.)
- RSSO is the secretary



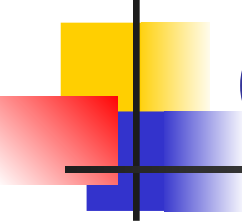
Chapter 2 Ionizing Radiation

- Need USAREUR/7A permission to obtain an NRC license
- ARA needed for possession RAM not licensed by NRC or obtained under a host nation license
- RSSO pre-approval required for new equipment to be fielded in USAREUR/7A
- ARP needed for contractors to use commercial sources on USAREUR/7A property



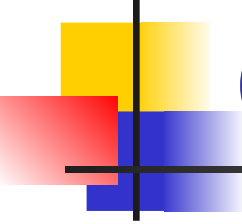
Chapter 2 Continued

- USAREUR/7A and IMA-E issue Army Radiation Authorizations
- Installations issue Army Radiation Permits
- Decommissioning Records kept by Installation's Facility Engineers
- Transport of Radioactive Material IAW ADR, RID, and 49 CFR
- Disposal of Unwanted, Unneeded radioactive material through Pirmasens USATR-E RMPF



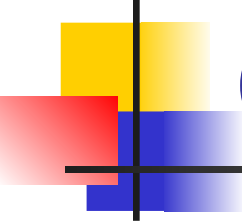
Chapter 3 Lasers

- LSO required for non-type classified Class IIIb and Class IV lasers
- Outdoor use to comply with AR 385-63 and MIL-HNDBK 828a
 - Tactical lasers to be treated as direct fire weapons
 - Laser safety briefing required prior to commencing work with lasers
 - Specular reflections to be controlled



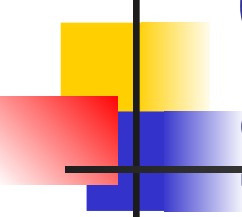
Chapter 3 (Cont)

- Direct intra-beam viewing of lasers is prohibited
- Night vision devices will not be use for laser eye protection
- Avoid dazzle and glare for critical mission elements such as driving military vehicles or flying aircraft
- Only Class I, Class II, and Class IIIa lasers to be used as handheld laser pointers
- Unprotected personnel to be kept out of the SDZ
- Military lasers to be disposed IAW DODI 4160-31-M



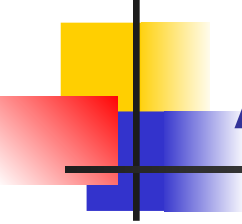
Chapter 4 RF Emitters

- General Guide Lines from TB MED 523:
 - Uncontrolled RF Area: Maximum: $<10 \text{ mW/cm}^2$ power density
 - Prohibited zone: 50 mW/cm^2
 - Between 50 mW/cm^2 and 10 mW/cm^2 is RF Controlled Area
- Radio Frequency Permissible Exposure Levels (PELs) found in Appendix C-2 thru C-4.
- List C-5 has been extracted for your use from MIL-HNDBK 828a and TB 43-0133
- Units to screen RF emitters against Appendix C of AE 11-9
- RF protection program required for equipment exceeding PEL
- Inventory of RF emitters required
- Annual copy to Installation RSO
- A list of RF controlled areas to be maintained by the commander



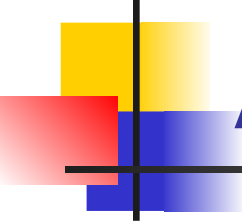
Chapter 5 Radiation Standards and Guidance

- Appendix A, B, C, and D list program guidance and exposure standards
- A: Transport of Radioactive Materials
- B: Damaged or Unwanted Radioactive Materials
- C: PELS and Dose Limits
 - C-1 Ionizing Radiation
 - C-2 Radio Frequency Radiation Authorities
 - C-3 PELs for RF controlled environments
 - C-4 PELs for RF uncontrolled environments
 - C-5 List of RF and Optical Emitters requiring a radiation protection program.
- D: Ionizing Radiation Program Guidance
- E: Glossary



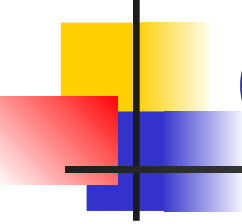
Appendices (Cont)

- D: Guidance on Radiation Safety Practice
 - D-1 Training
 - D-2 Inventories
 - D-3 Storage of Radioactive Materials
 - D-4 Leak Testing
 - D-5 Use Location Tracking
 - D-6 Dosimetry
 - D-7 Audits/Inspections
 - D-8 Emergencies
 - D-9 Calibration of Equipment
 - D-10 Posting and Surveys of Work Areas
 - D-11 Security and Control of Radioactive Material



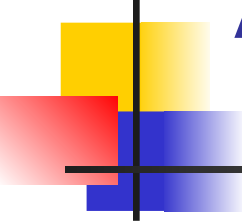
Appendices (Cont)

- E: Glossary



Comments

- Equipment subject to AE 11-9 and AR 11-9 must be operated IAW Army TMs, FMs, TB,s GPMS, SOUMs, etc.
- Records will be kept IAW AR 25-400-2 Army Records Information Management System (ARIMS)



AE 11-9

- This is a work in progress
- Your comments are needed to help improve the regulation